

Fig. 1

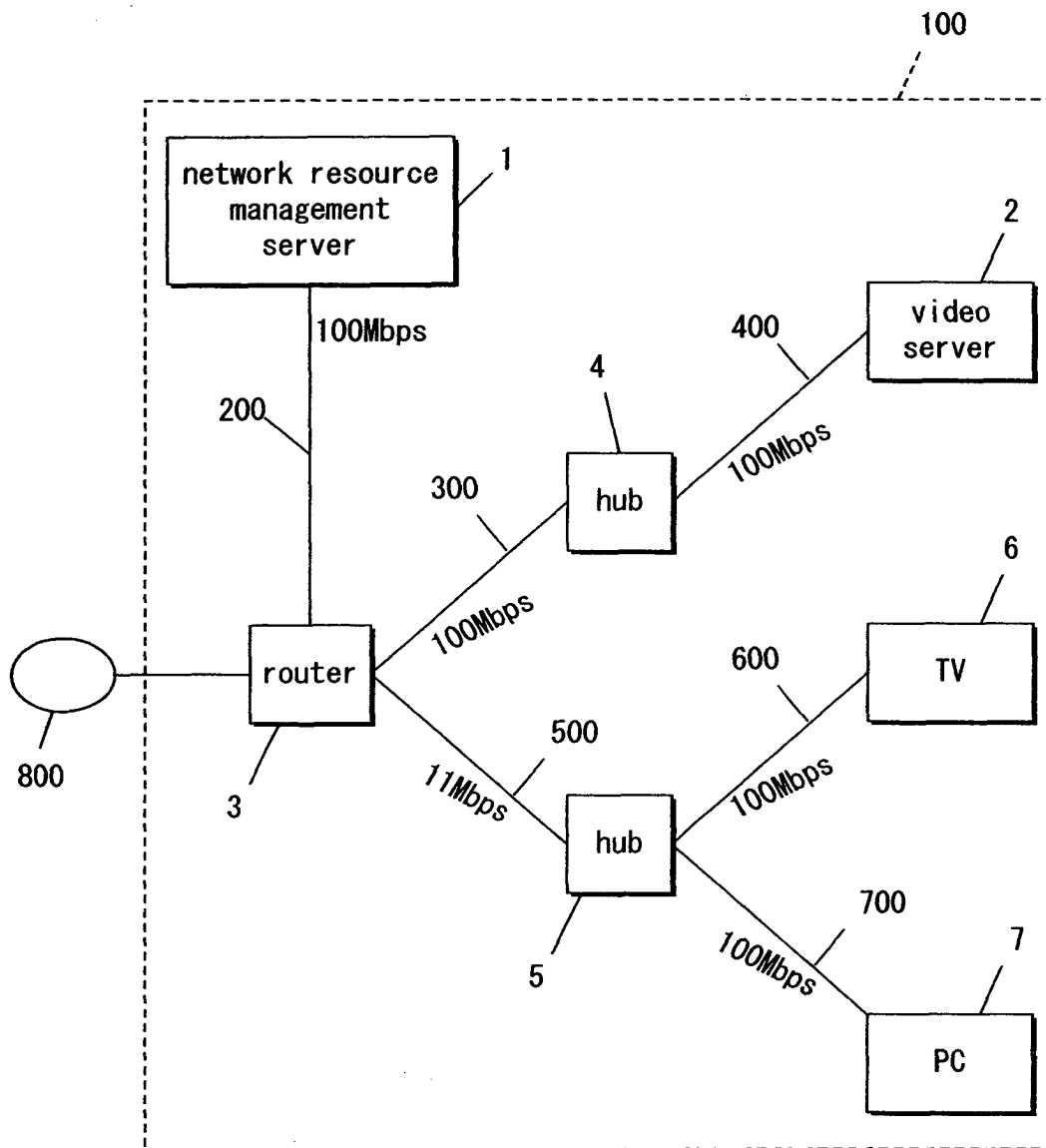


Fig. 2

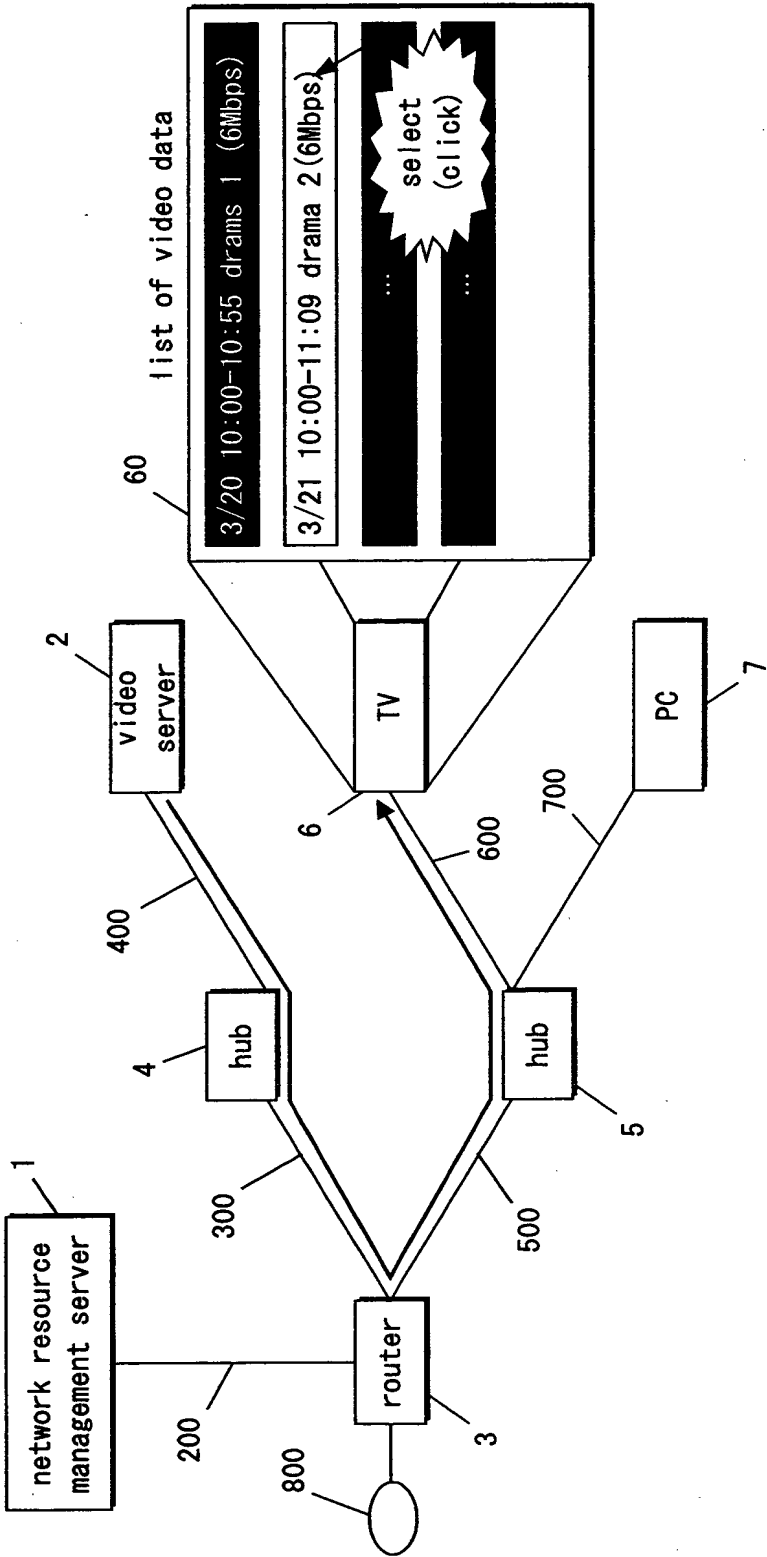


Fig. 3

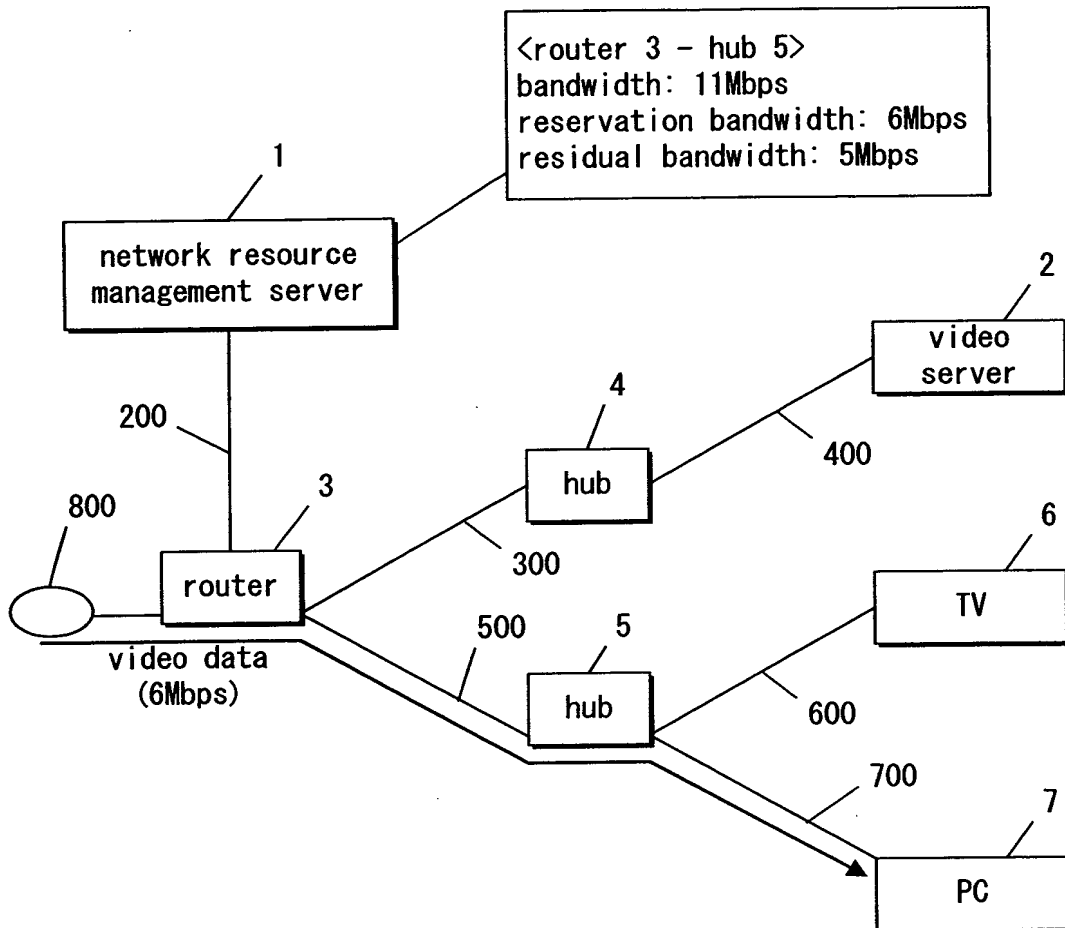


Fig. 4

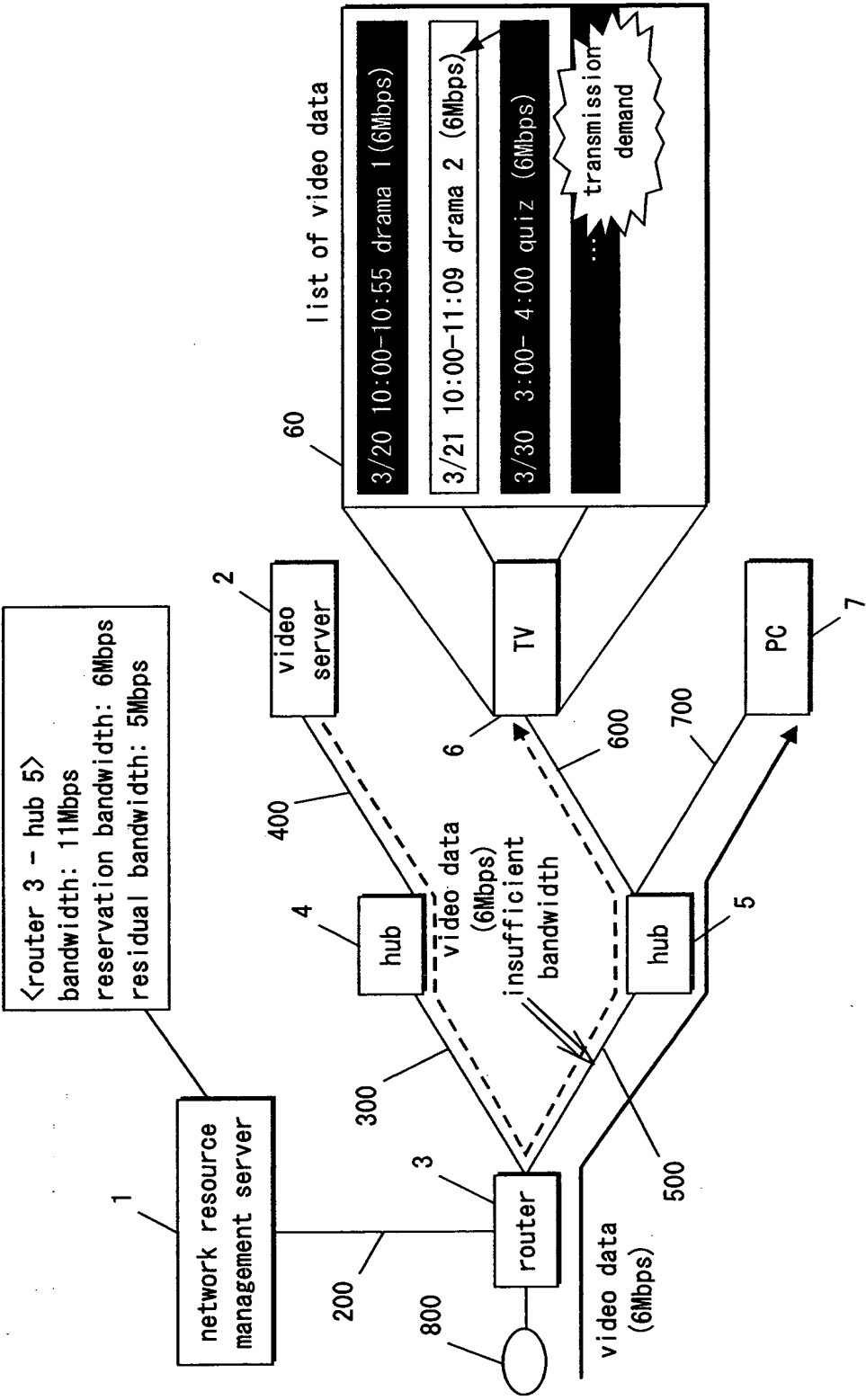


Fig. 5

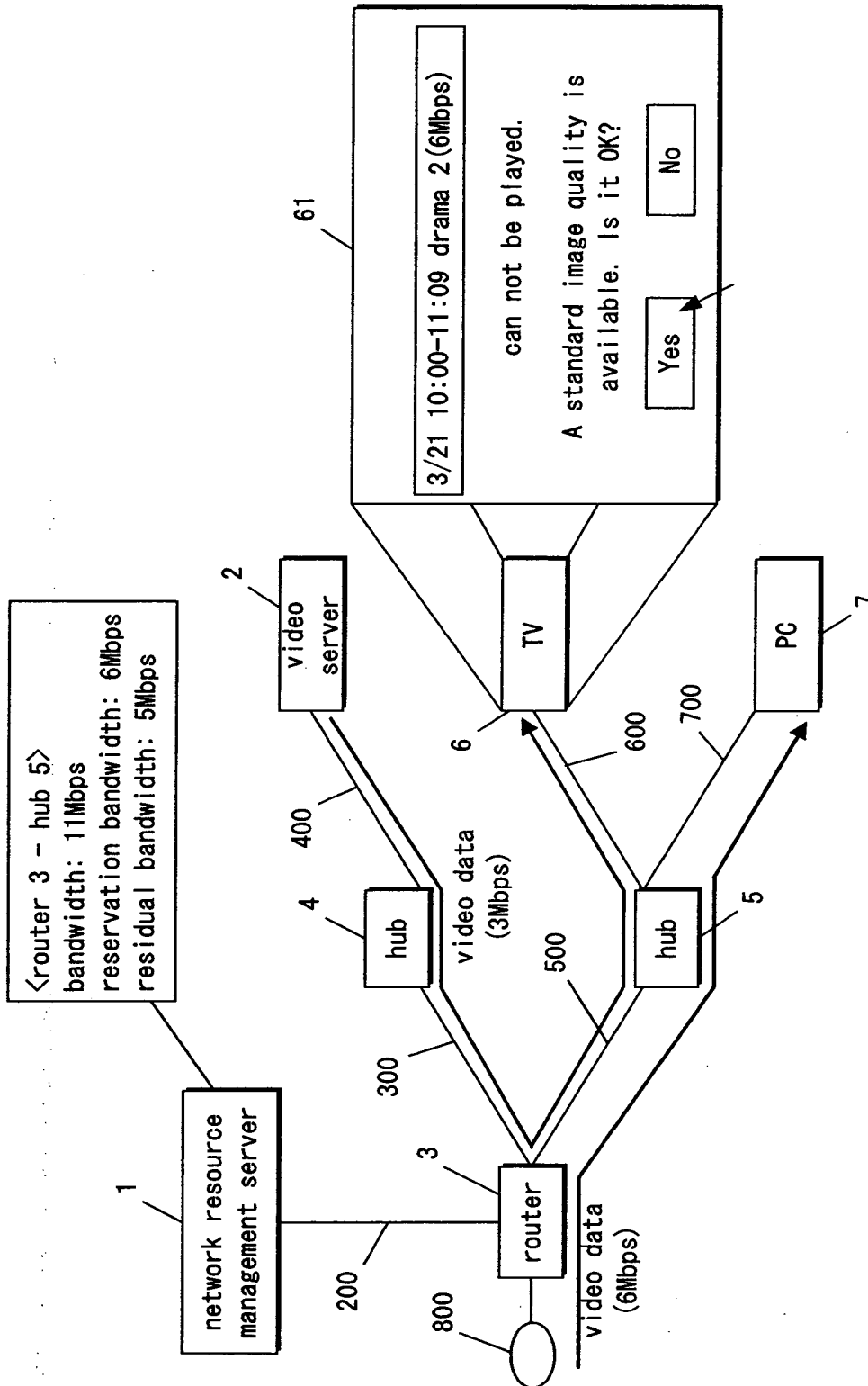
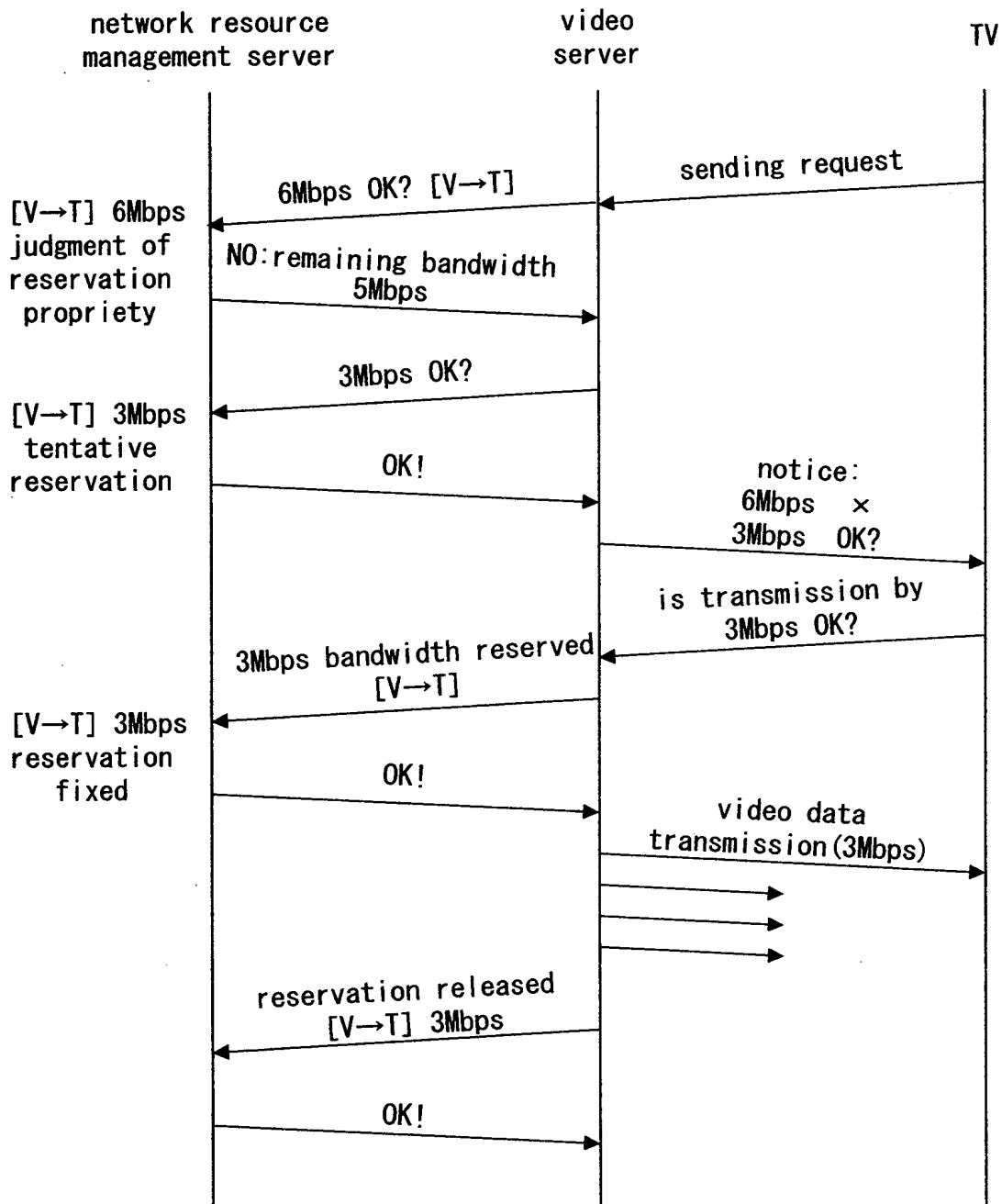


Fig. 6



V: video server
T: TV

Fig. 7

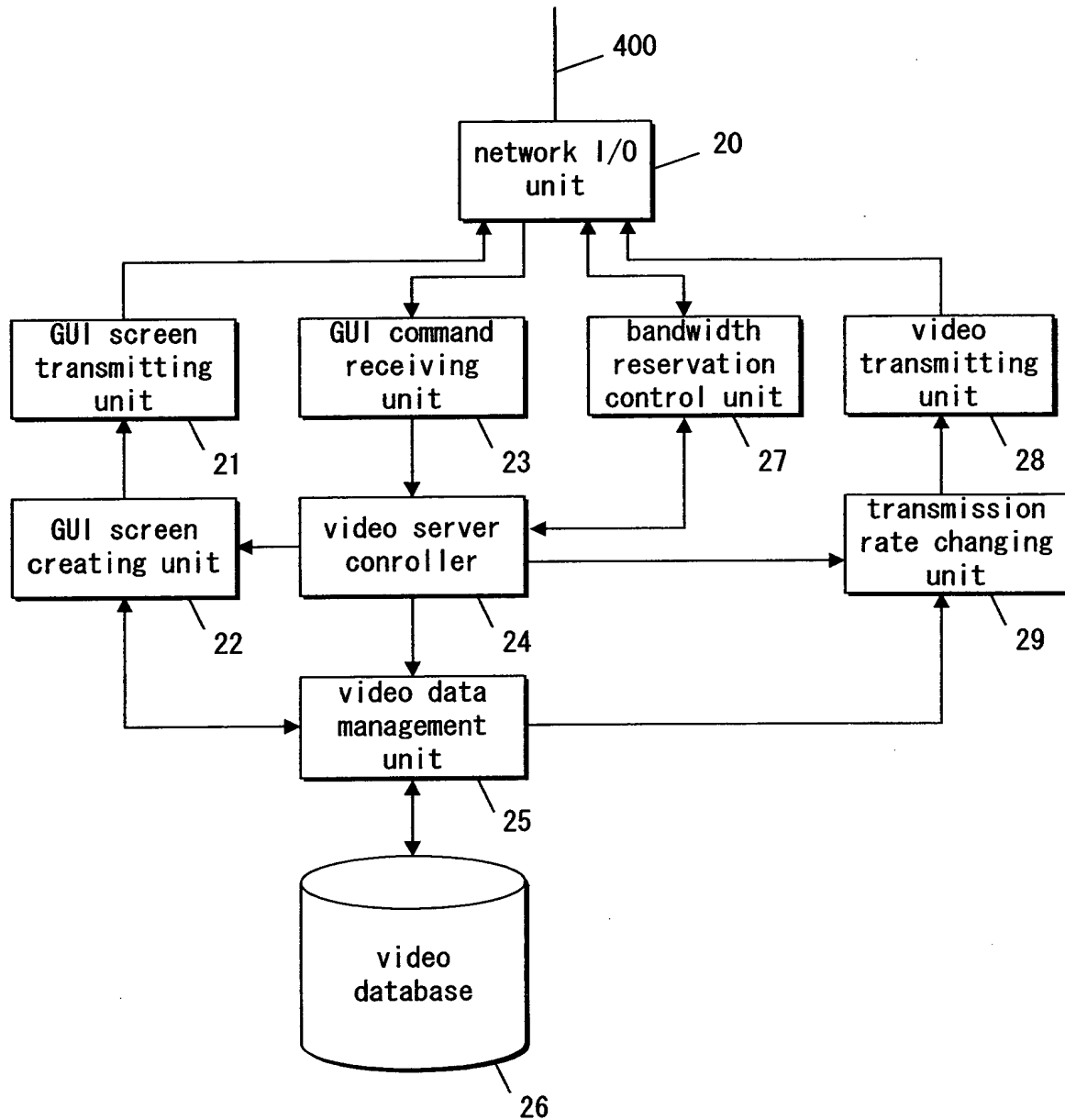


Fig. 8

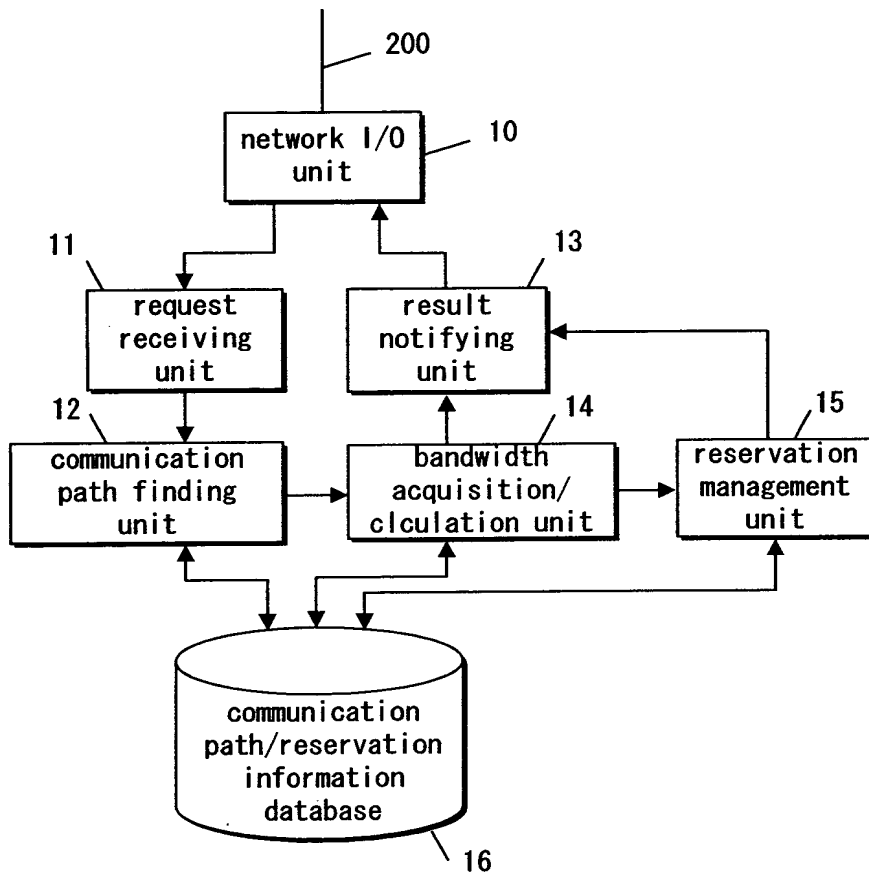
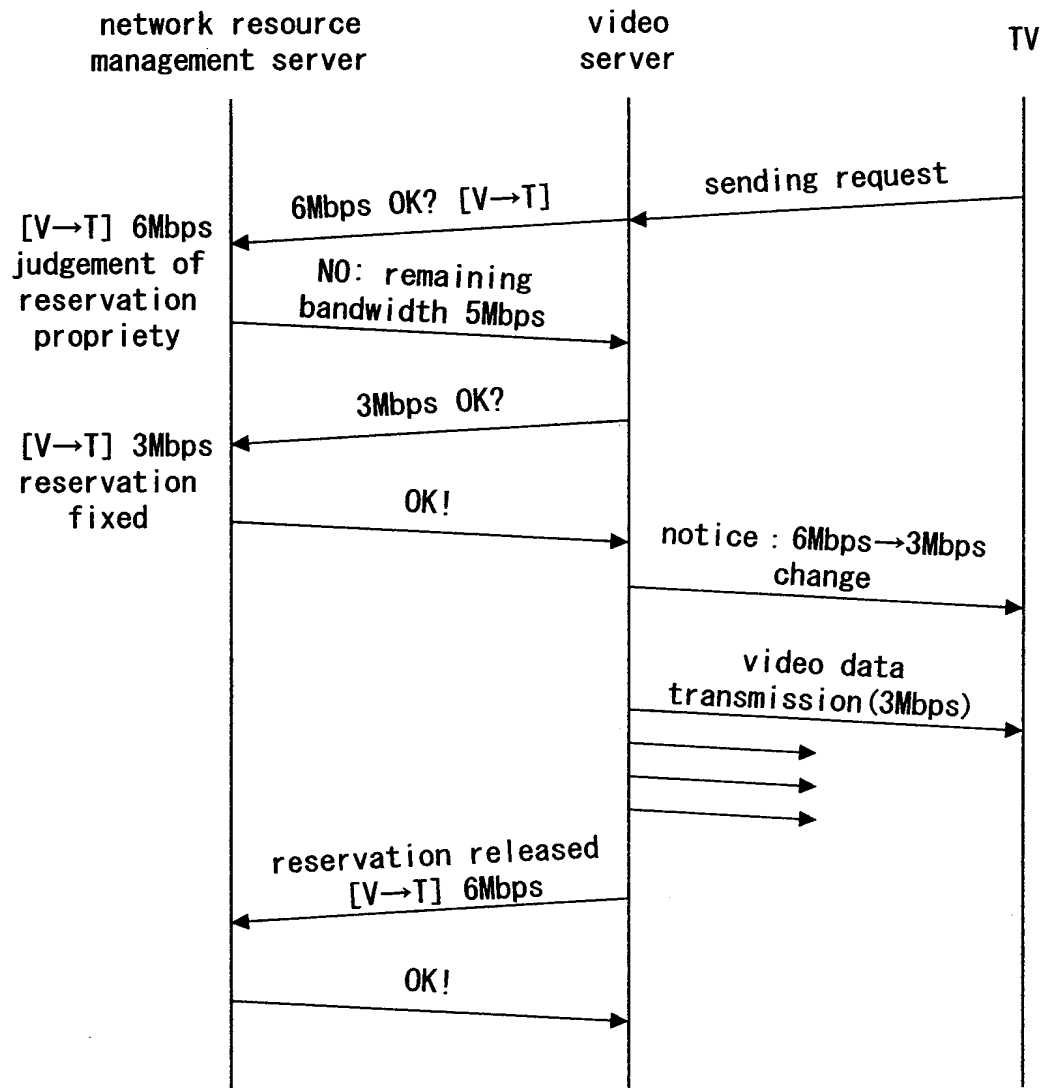


Fig. 9

path			bandwidth	reservation bandwidth	residual bandwidth
video server 2	→	hub 4	100Mbps	0Mbps	100Mbps
hub 4	→	router 3	100Mbps	0Mbps	100Mbps
router 3	→	hub 5	11Mbps	6Mbps	5Mbps
hub 5	→	TV 6	100Mbps	0Mbps	100Mbps
hub 5	→	PC 7	100Mbps	6Mbps	94Mbps

Fig. 10



V: video server
T: TV

Fig. 11

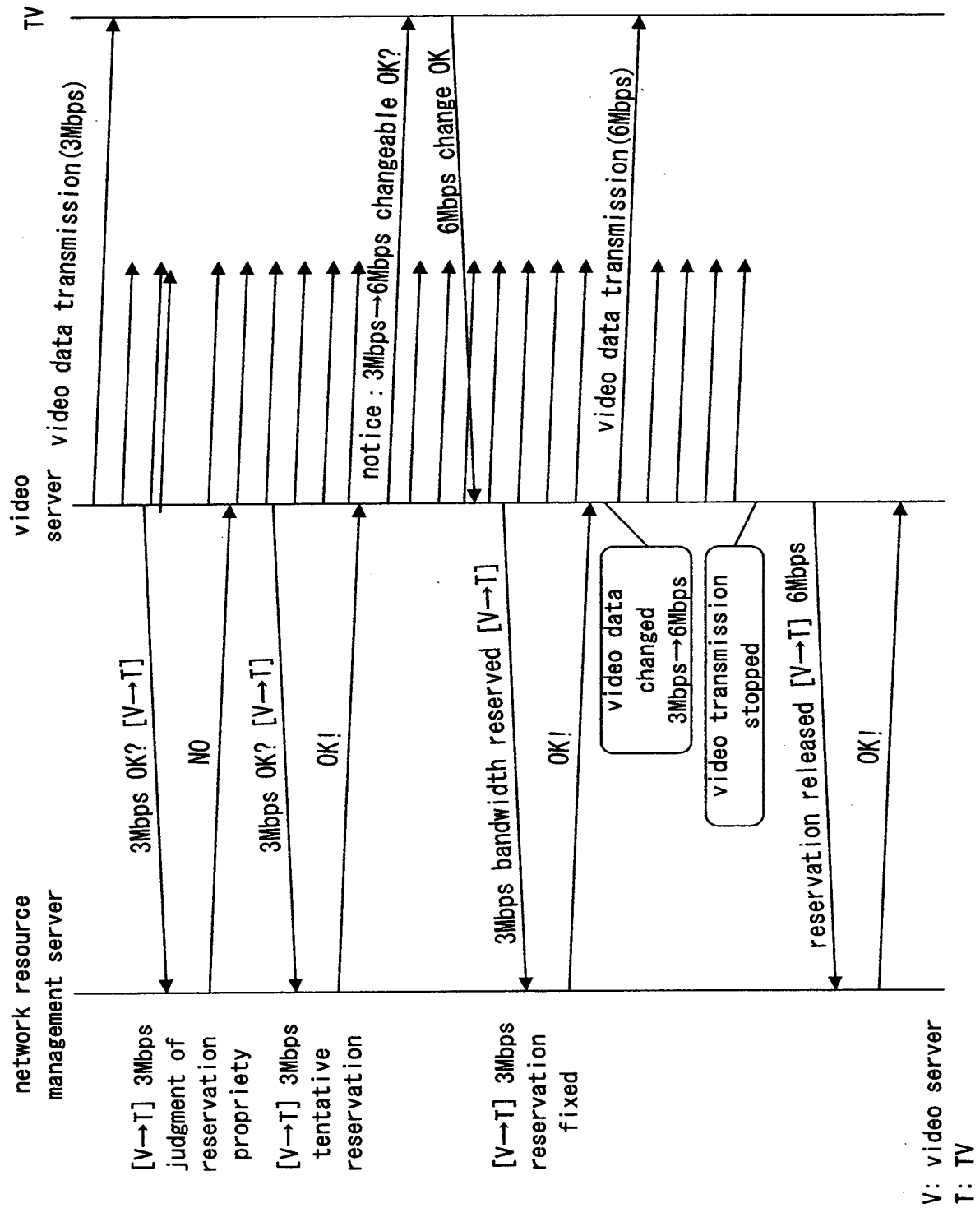
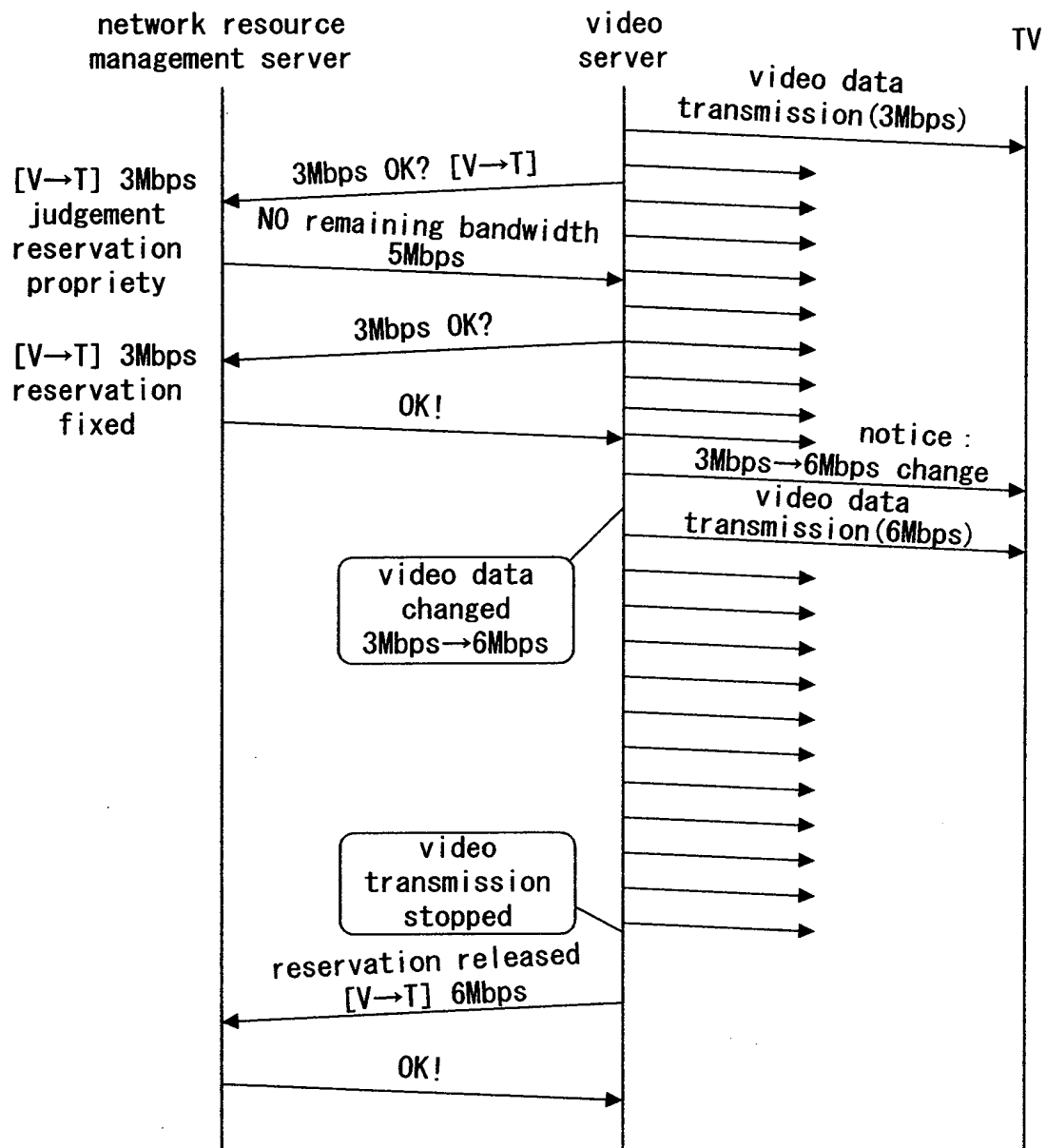


Fig. 12



V: video server
T: TV

Fig. 13

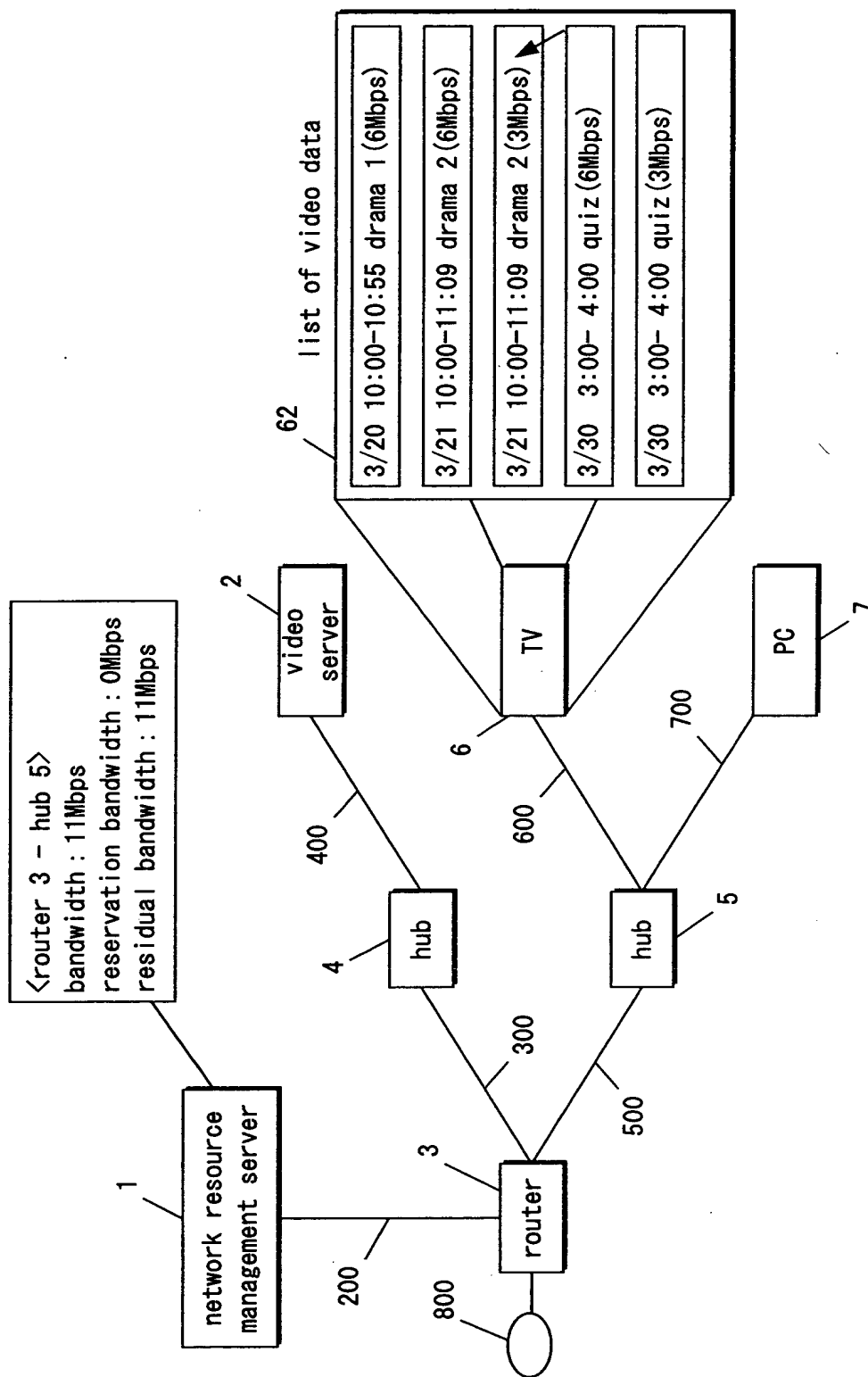


Fig. 14

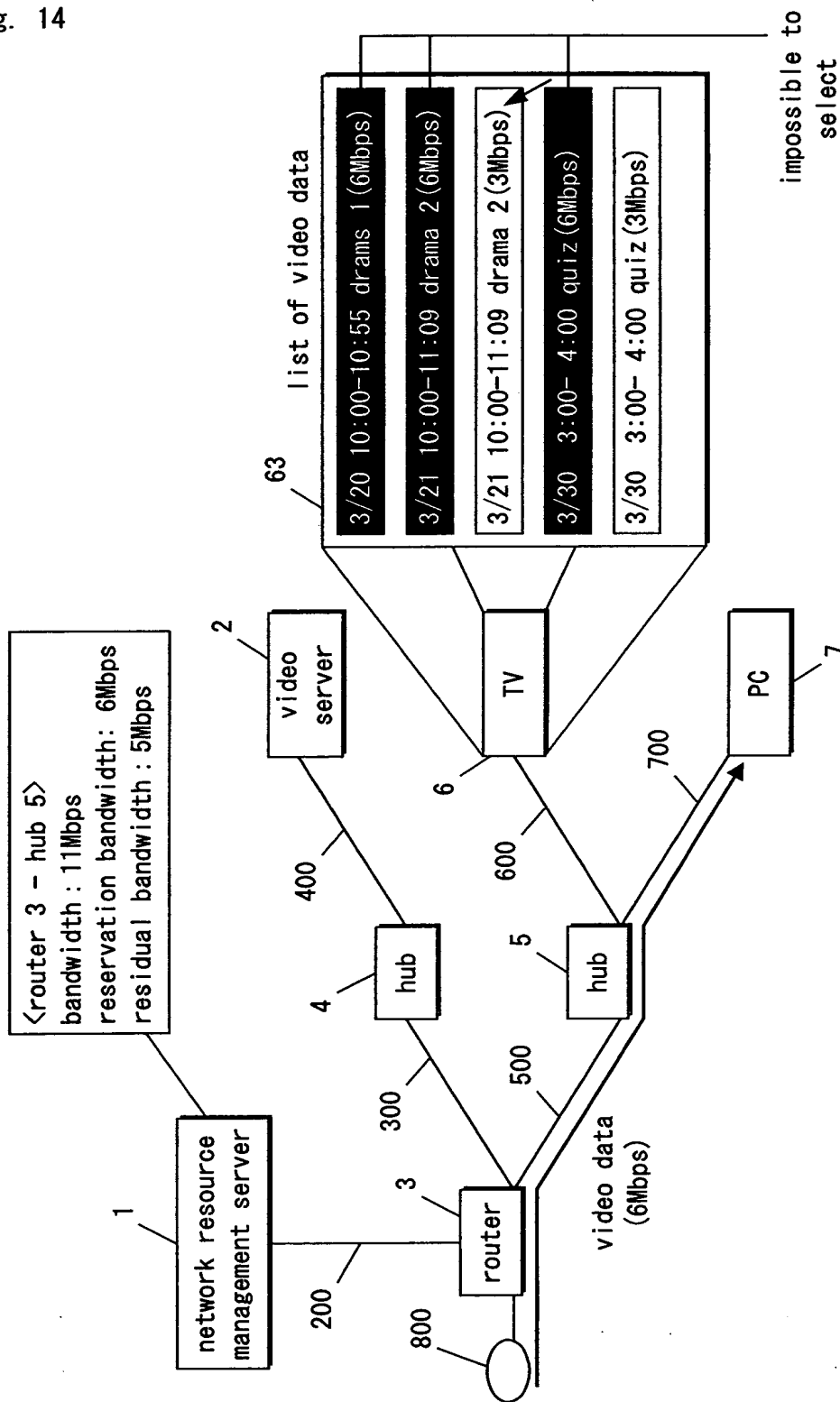


Fig. 15

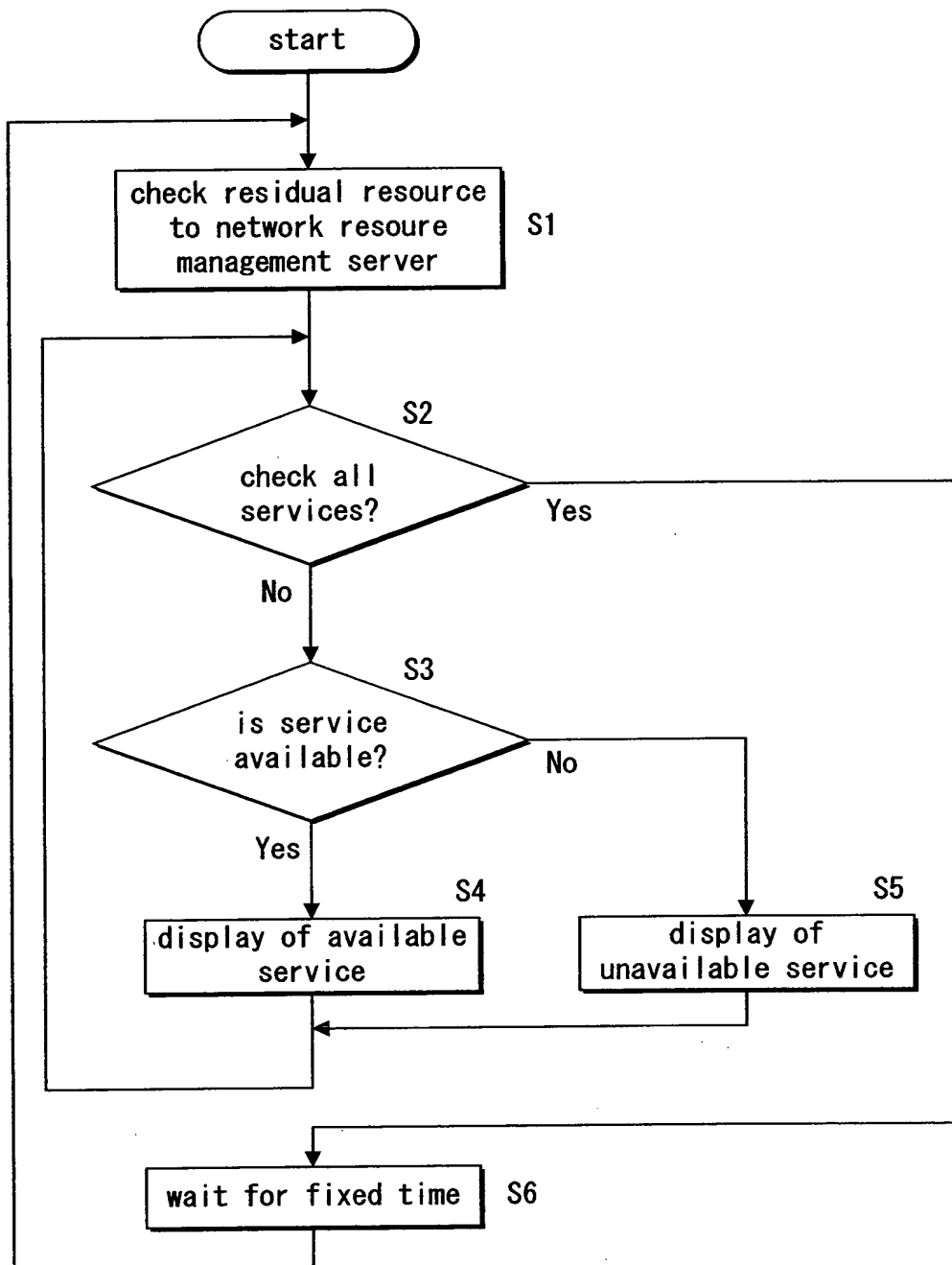


Fig. 16

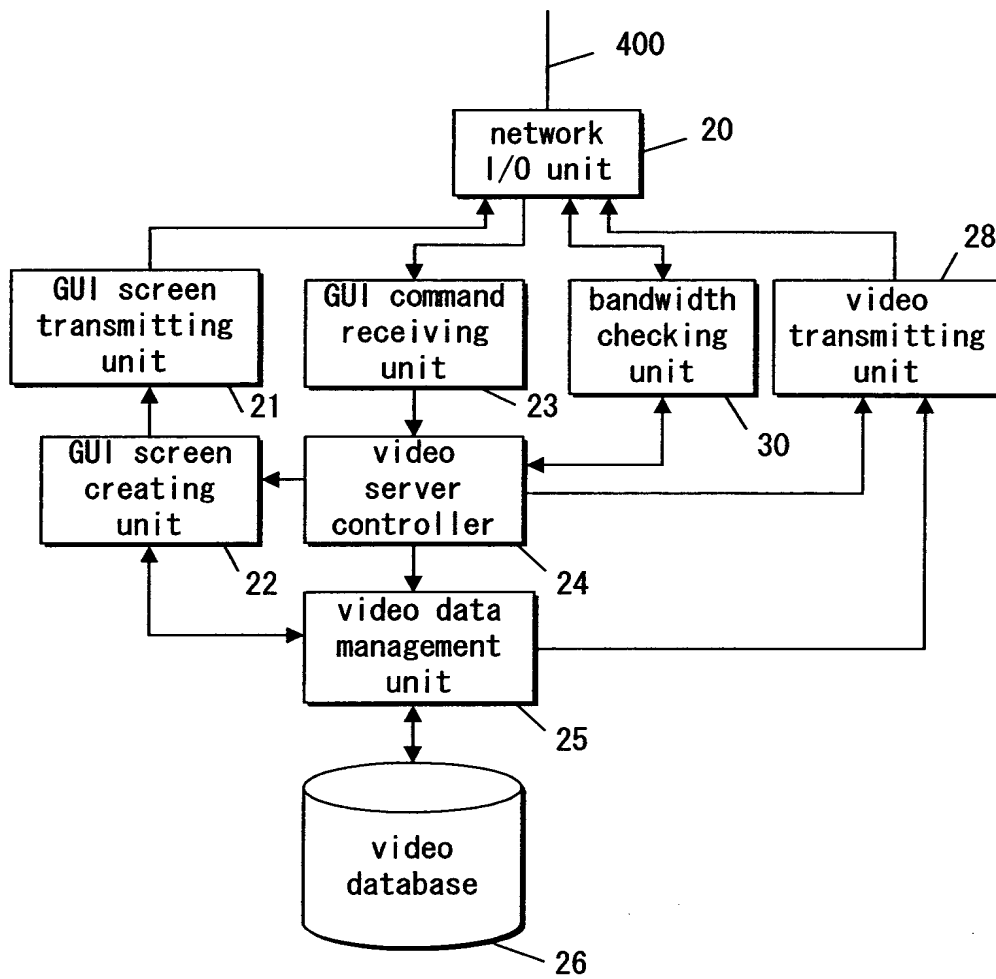


Fig. 17

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

Fig. 18

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

Fig. 19

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

Fig. 20

date	time	title	quality
3/23	16:00-17:00	amination 1	3Mbps
3/30	16:00-17:00	animation 1	3Mbps

Fig. 21

	date	time	title	quality
▶	3/23	16:00-17:00	animation 1	3Mbps
	3/30	16:00-17:00	animation 1	3Mbps
	3/20	22:00-22:55	drama 1	6Mbps
	3/21	22:00-23:09	drama 2	6Mbps
	3/27	22:00-22:55	drama 1	6Mbps

Fig. 22

6Mbps

3Mbps

Following titles can not be played now.

	date	time	title	quality
▶	3/20	22:00-22:55	drama 1	6Mbps
	3/21	22:00-23:09	drama 2	6Mbps
	3/27	22:00-22:55	drama 1	6Mbps

Fig. 23

6Mbps

3Mbps

Following titles can be played now.

date	time	title	quality
3/23	16:00-17:00	animation 1	3Mbps
3/30	16:00-17:00	animation 1	3Mbps

Fig. 24





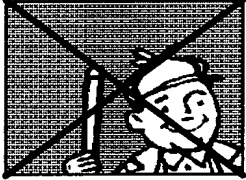


date	time	title	preview	
3/20	22:00-22:55	drama 1		
3/21	22:00-23:09	drama 2		
3/23	16:00-17:00	animation 1		
3/27	22:00-22:55	drama 1		

Fig. 25

	date	time	title	quality
	3/20	22:00-22:55	drama 1	6Mbps
▷	3/21	22:00-23:09	drama 2	6Mbps
	3/23	16:00-17:00	animation 1	3Mbps
	3/27	22:00-22:55	drama 1	6Mbps
	3/30	16:00-17:00	animation 1	3Mbps
6Mbps service can not be provided by the shortage of bands				

Fig. 26

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

total bandwidth

11Mbps

used bandwidth

6Mbps

3Mbps

service is
available

Fig. 27

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

total bandwidth 11Mbps

used bandwidth 6Mbps

6Mbps

service is unavailable

Fig. 28

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

total bandwidth 11Mbps

used bandwidth 3Mbps 3Mbps 3Mbps

two remaining
services are
available

Fig. 29

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

total bandwidth 11Mbps

used bandwidth 3Mbps 6Mbps

one remaining
service is
available

Fig. 30

date	time	title	quality
3/20	22:00-22:55	drama 1	6Mbps
3/21	22:00-23:09	drama 2	6Mbps
3/23	16:00-17:00	animation 1	3Mbps
3/27	22:00-22:55	drama 1	6Mbps
3/30	16:00-17:00	animation 1	3Mbps

state of used bandwidth

3Mbps	3Mbps	...
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Fig. 31

date	time	title	quality
3/20	22:00–22:55	drama 1	6Mbps
3/21	22:00–23:09	drama 2	6Mbps
3/23	16:00–17:00	animation 1	3Mbps
3/27	22:00–22:55	drama 1	6Mbps
3/30	16:00–17:00	animation 1	3Mbps

state of used bandwidth 3/11Mbps

